

# Model DPB

48mm X 48mm Panel Mounting  
Differential Low Pressure Gauge / Switch

## Description

DPB model is ideal for the application (such as HVAC) with differential pressure, vacuum pressure, gauge pressure and especially low pressure of non-corrosive gases or air measured. Device for Low Pressure Gauge / Switch, which is using MICOM, improved Accuracy.

## Features

- ▶ CE Certified
- ▶ 3-1/2 digit LED display
- ▶ 48mm X 48mm Panel Mounting Type
- ▶ Auto Zero
- ▶ 2Ch Relay or 2Ch NPN Open Collector Alarm output
- ▶ 1~5VDC or 4~20mA analog output (Adjustable Pressure Range)
- ▶ Measuring range 0~300..10kPa diff.
- ▶ 0.5~1.5%FS accuracy
- ▶ Piezoresistive silicon cell
- ▶ Use with non-corrosive, non-ionic media

## Applications

- ▶ Airflow Measurement
- ▶ Room Static Pressure
- ▶ VAV Box
- ▶ Lab/Fume Hood Control
- ▶ Clean Room Control

## Specifications



### Range

0~300, 500, 750Pa 0~1, 2, 3, 5, 10kPa  
±300, ±500, ±750Pa, ±1, ±2, ±3, ±5, ±10kPa

### Performance

Accuracy	±0.5%FS±1digit(≥1000Pa), ±1%FS±1digit(500, 750Pa), ±1.5%FS±1digit(300Pa)
Thermal Effect on Zero	±0.15%FS/°C(≥750Pa), ±0.2%FS/°C(500Pa), ±0.3%FS/°C(300Pa)
Thermal Effect on Span	±0.15%FS/°C(≥750Pa), ±0.2%FS/°C(500Pa), ±0.3%FS/°C(300Pa)
Compensated Temperature Range	0 ~ 50°C
Operating Temperature Range	-10 ~ 70°C

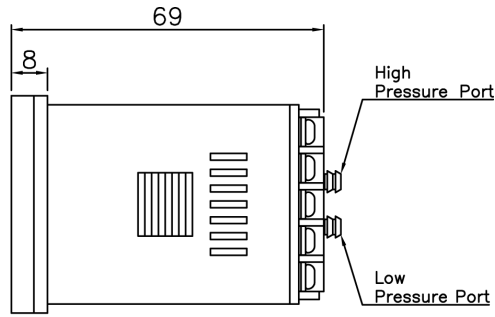
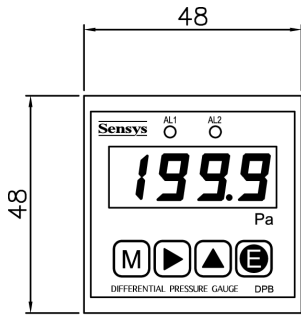
### Electrical

Display	3-1/2 Digit LED
Excitation	12~24VDC±10% (Relay Type : 18~24V)
Output	
Switching Signal	2 RELAY(5A 30VDC / 5A 250VAC) or NPN Open Collector TR(80mA, 24VDC)
Analog Signal	1~5VDC or 0~10VDC or 4~20mA (Adjustable Pressure Range)
Electrical Connection	Terminal

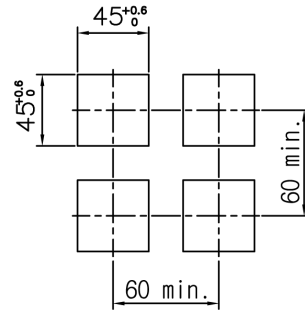
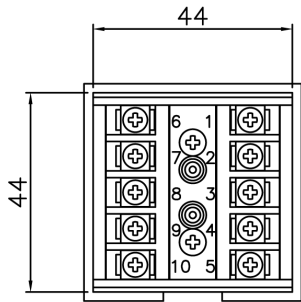
### Physical

Proof Pressure	300%FS Max.
Burst Pressure	500%FS Min.
Pressure Port	1/8" Nipple
Media-Wetted Materials	Brass(Ni plated), SiO <sub>2</sub> , Si Rubber

## Dimension



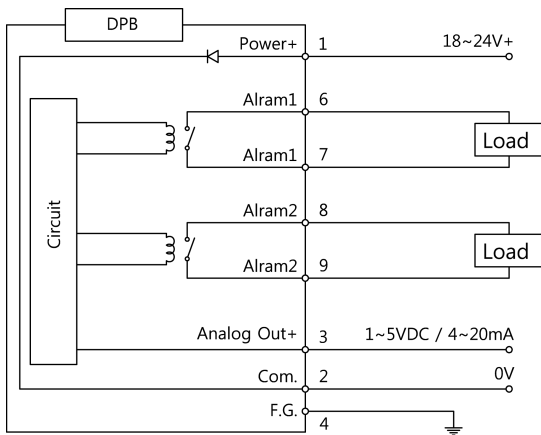
Pin No.	Connections			
1	Power+			
2	Com.			
3	Analog output+			
4	F.G.			
5	N.C.			
6	Relay Output	Alarm1	NPN TR Output	Alarm1
7		Alarm1		Com.
8		Alarm2		Alarm2
9		Alarm2		Com.
10	N.C.			



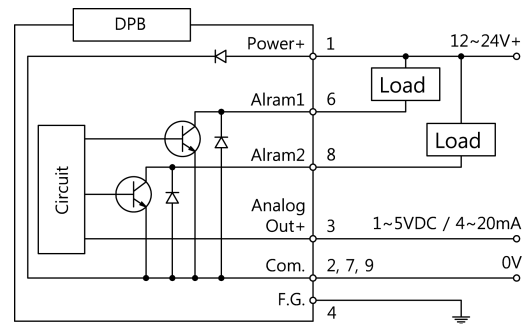
\* PANEL Thickness : 1~10mm

## Circuit Diagram

### ▶ Relay Output

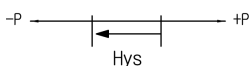
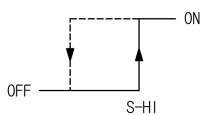


### ▶ NPN Open Collector Tr. Output

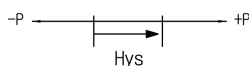
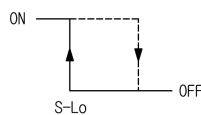


## Alarm Mode

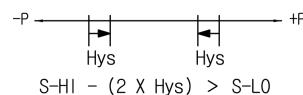
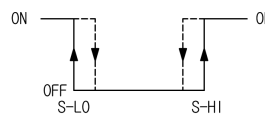
### ▶ Hi Mode



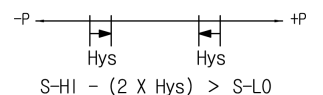
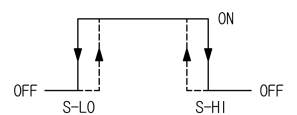
### ▶ Low Mode



### ▶ A Mode



### ▶ B Mode



## Ordering Information

**DPB D 0500 A**

**Model Name**

**Output**

D : 1~5V, Relay  
E : 1~5V, NPN TR  
K : 0~10V, Relay  
J : 0~10V, NPN TR  
F : 4~20mA, Relay  
G : 4~20mA, NPN TR

**Pressure Unit**

A : Pa  
R : kPa  
D : mmH<sub>2</sub>O

**Pressure Range**

XXXX : 0~Range  
CXXX : ±Range